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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,623	12/29/2000	Akhilesh Kumar	2207/9860	8608

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EXAMINER	
HUYNH, KIM T	

ART UNIT	PAPER NUMBER
2112	10

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/751,623	Applicant(s) KUMAR ET AL.	
	Examiner Kim T. Huynh	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 December 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morrison et al. (Pub. No.: US 2002/0038398) in view of Nakamura (US Patent 5,850,529)

As per claims 1,10, 19 Morrison discloses a method for executing a locked bus transaction in a multi-node system, comprising:

- initiating a locked-bus transaction at a bus agent;[0025], claim 4
- transmitting a locked-bus request to a first node controller; and [0025]

Morrison disclose all the limitations as above except deferring the locked-bus transaction at the bus agent by said first node controller. However, Nakamura discloses controller detects whether the PCI bus is in a state of resource lock by using the lock signal at the granted bus access enable signal and prohibiting controller from executing a transaction when PCI bus is in a state of resource lock. Therefore, the target retry generated. (col.2, lines 38-65). Furthermore, Nakamura discloses a target retry is sent from a target device. (emphasizing at the bus agent as applicant claimed, col.13, lines 1-7)

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate Nakamura's teaching into Morrison's system so as to improve the compatibility between different architectures. (col.2, lines 11-16)

As per claims 2,11, Morrison discloses the method further comprising transmitting the locked-bus request from the first node controller to a second node controller(fig.2, 222), [0027], [0023], wherein controller 222 corresponding to one of nodes 107-109).

As per claims 3,12, Morrison discloses the method further comprising preventing bus transactions on a bus coupled to said second node controller. [0035], wherein retries transaction implies preventing if not available)

As per claims 4,13, 20, Morrison discloses the method further comprising performing the locked-bus transaction by the bus agent over the multi-node system.[0021]

As per claims 5,14, Morrison discloses the method further comprising asserting a signal to said bus agent by said first node controller to prevent said bus agent from initiating a bus transaction.[0028], wherein pending locked transaction implies preventing)

As per claims 6,15, Morrison discloses the method further comprising the method further comprising transmitting the locked-bus request from the first node controller to a second node controller. (fig.2, 222), [0027], [0023], wherein controller 222 corresponding to one of nodes 107-109)

As per claims 7,16, Morrison discloses the method further comprising preventing bus transactions on a bus coupled to said second node controller.[0035]

As per claims 8,17, Morrison discloses the method further comprising deasserting said signal to said bus agent by said first node controller.[0028]

As per claims 9,18, Morrison discloses the method further comprising performing the locked-bus transaction by the bus agent over the multi-node system.[0021]

As per claim 21, Morrison discloses the method for executing a locked bus transaction in a multi-node system, comprising:

- initiating a locked-bus transaction at a bus agent for a first I/O node including a first I/O device; [0017], [0025], [0027]
- transmitting a locked-bus request to a first node controller; and [0025],[0027]

Morrison disclose all the limitations as above except deferring the locked-bus transaction at the bus agent by said first node controller. However, Nakamura discloses controller detects whether the PCI bus is in a state of resource lock by using the lock signal at the granted bus access enable signal and prohibiting controller from executing a transaction when PCI bus is in a state of resource lock. Therefore, the target retry generated. (col.2, lines 38-65). Furthermore, Nakamura discloses a target retry is sent from a target device. (emphasizing at the bus agent as applicant claimed, col.13, lines 1-7)

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate Nakamura's teaching into Morrison's system so as to improve the compatibility between different architectures. (col.2, lines 11-16)

As per claim 22, Morrison discloses the method further comprising transmitting the locked-bus request from the first node controller to the first I/O node [0025], [0027]

As per claim 23, Morrison discloses the method further comprising preventing transactions at the first I/O node for I/O devices coupled in said first I/O node. [0035]

As per claim 24, Morrison discloses method further comprising performing the locked-bus transaction by the bus agent over the multi-node system to the first I/O device. [0021], [0027]

Response to Amendment

3. Applicant's amendment filed on 2/26/04 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703)305-5384 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 8:30AM- 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815 or via e-mail addressed to [mark.rinehart@uspto.gov]. The

fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5631.

Kim Huynh

March 9, 2004

Khanh Dang
Primary Examiner